CHRISTOPOULOS et al. (Serial No. 09/394,428

3/11/08

The paragraph beginning at page 2, line 31 and continuing through page 3, line 5:

-- This transcoding might have to implement a spatial resolution reduction of the video in order to fit into the bandwidth of a particular receiver. For example, an ISDN subscriber might be transmitting video in Common Intermediate Format (CIF) (288x352 pixels), while a PSTN subscriber might be able to receive video only in a Quad Common Intermediate Format (QCIF) (144x176). Another example is when a particular receiver does not have the computational power to decode at a particular resolution and therefore a reduced resolution video has to be transmitted to that receiver. Additionally, transcoding of HDTV to SDTV requires a resolution reduction. --

IN THE CLAIMS:

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

- 1. (Amended) An encoder or decoder, comprising:
- first processing circuitry for calculating a discrete cosine transform (DCT) of length N/2, N being a positive, even integer, to produce two sequences of coefficients of length N/2, that 'represent the first and second half, respectively, of an original sequence of values of length N, and

second processing circuitry for calculating a DCT of length N directly from the two sequences of coefficients of length N/2.

- 2. (Amended) An encoder or decoder comprising:
- first processing circuitry for calculating a discrete cosine transform (DCT) of length $N/2 \times N/2$, N being a positive, even integer, to produce four sequences of coefficients, and
- second processing circuitry for calculating a DCT of length N x N directly from the four sequences of coefficients.
- 3. (Amended) The encoder or decoder of claim 1, wherein the second processing circuitry for calculating DCT of length N is arranged to calculate the even coefficients of the DCT of length N as:

B3.